Office Action Summary	Application No.	Applicant(s)	
	09/972,961	CHINO, NAOYOSHI	
	Examiner	Art Unit	
	Hai C Pham	2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,5 and 8-10* is/are rejected.

7)☒ Claim(s) *3,4,6 and 7* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3 & 4*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

2. Claim 6 is objected to because of the following informalities:

- Line 1, "according to claim 4" should read --according to claim 5--. Claim 6 is believed to be dependent from claim 5 instead of claim 4 since claim 6 refers to a limitation recited in claim 5, namely "the planar light source", which is not defined in claim 4.

  Appropriate correction is required.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1 and 8-9 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 3-5 of U.S. Patent No. 6,714,265. Although the conflicting claims are not identical, they are not patentably distinct from each other because the abovementioned claims of the U.S. Patent recites all the claimed elements recited in the corresponding claims of the current Application as mentioned above, including "a substantially parallel rays generating element arranged between the light source and the image display device", which describes in a slight difference in wording the "light linearizing device" recited in claim 1 of the current Application, wherein the light linearizing device is further defined as "wherein the light linearizing device converts the light from the light source into linear and substantially parallel rays such that the linear and substantially parallel rays can be incident on a display screen of the image display device".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2, 5, 8 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakayama et al. (JP 11-242298).

Nakayama et al., an acknowledged prior art, discloses a printing device comprising a light source (3), a light linearizing device (4) for linearizing light from the light source, a transmission type image display device (LCD 1), and a photosensitive recording medium (2), wherein the light source, the light linearizing device, the transmission type image display device and the photosensitive recording medium are arranged along a direction in which the light from the light source advances, and a display image transmitted through the image display device is transferred to the photosensitive image recording medium (Fig. 3), and wherein the light linearizing device converts the light from the light source into linear and substantially parallel rays such that the linear and substantially parallel rays can be incident on a display screen of the image display device and scans relatively the display screen of the image display device with the linear and substantially parallel rays (the grid 4 playing the role of converting the light source rays into linear and parallel rays, e.g., as compared to diffused rays, such that the overlapping of the stray rays on the adjacent pixels of the LCD 1 reduced and thus eliminating the overlapping of the pixels on the sensitive film 2) (see paragraphs [0029] to [0031] of the English Translation).

With regard to claims 2, 5, 8 and 10, Nakayama et al. further teaches:

- the light source being a linear source (fluorescent tubing 3) (paragraph [000018]) wherein the light linearizing device (grid 4) converts the light from the linear light source into the linear and substantially parallel rays,
- wherein the light source is a planar light source (the light from the light source being guided through the back light so as to form a planar source) (Figs. 3), and

wherein the light linearizing device (grid 4) converts the light from the planar light source into the linear and substantially parallel rays,

- wherein the display image on the image display device and the image transferred to the photosensitive recording medium are substantially identical in size (the dimension of the dot on the sensitive film 2 having the magnitude of the pixel of the LCD 1) (paragraph [0025]),
- wherein the image display device is a transmissive type liquid crystal display (LCD 1).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over in view of Nakayama et al.

Nakayama et al. further discloses each pixel size of the image display device (LCD 1) being 0.5 mm, and thus fails to teach the pixel size being not more than 0.2 mm. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the LCD display device with a pixel size less than 0.2 mm, since it has been held that discovering an optimum value of a result

effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Allowable Subject Matter

9. Claims 3-4 and 6-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter: the primary reason for the indication of the allowability of claim 3 is the inclusion therein, in combination as currently claimed, of the limitation that "the linear light source and the light linearizing device are integrally combined with each other and the image display device and the photosensitive recording medium are also integrally combined with each other such that the linear light source and the light linearizing device can be moved along a side of the transmission type image display device in a relative relation to the image display device and the photosensitive recording medium", which is not found taught or fairly suggested by the prior art made of record considered alone or in combination.

The primary reason for the indication of the allowability of claim 6 is the inclusion therein, in combination as currently claimed, of the limitation that "the light linearizing device is movable along a side of the planar light source", which is not found taught or fairly suggested by the prior art made of record considered alone or in combination.

The primary reason for the indication of the allowability of claim 7 is the inclusion therein, in combination as currently claimed, of the limitation that "the light linearizing device has a plurality of through-holes arranged in a direction perpendicular to a direction in which said light linearizing device is moved, and wherein said plurality of through-holes have a circular or polygonal cross section and a thickness not less than three times the diameter or equivalent diameter of said plurality of through-holes", which is not found taught or fairly suggested by the prior art made of record considered alone or in combination.

Pertinent Prior Art

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nelson (U.S. 4,828,366) discloses a laser-addressable liquid crystal display device having a mark positioning layer in which through-holes are formed such that the light passing through the layer is converted into as linear and parallel rays to expose the liquid crystal display device.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C Pham whose telephone number is (571) 272-2260. The examiner can normally be reached on M-F 8:30AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hai Phan

HAI PHAM
PRIMARY EXAMINER
May 24, 2004